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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,534	02/08/2002	Donna K. Barton	MINI 2195	1337

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SMITH-HILL AND BEDELL
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PORTLAND, OR 97229

EXAMINER

MARMOR II, CHARLES ALAN

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 03/25/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,534

Applicant(s)

BARTON ET AL.

Examiner

Charles A. Marmor, II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-13 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, drawn to a skin patch comprising a telesensor, classified in class 600, subclass 549.
 - II. Claims 14 and 15, drawn to a physiological data acquisition device including a sensor, a data storage element and an output means, classified in class 600, subclass 300.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as part of a physiological data acquisition device that does not include a telesensor, i.e. a transmitter and an antenna in the sensor element. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with John Smith-Hill on February 13, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14 and 15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. The disclosure is objected to because of the following informalities: in paragraph [0019], line 1, "22" apparently should read --24--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5-8 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "said temperature signal" in line 8. There is insufficient antecedent basis for this limitation in the claim. There is no temperature signal recited in the claim prior to this recitation. This limitation also is recited in line 4 of claim 6.

Regarding claim 8, the claim language renders the claim indefinite. Particularly, if the first face of the circuit substrate is in a "confronting relationship" with the second face of the first layer and the second face of the circuit substrate is in a "confronting relationship" with the first face of the second layer as recited in the claim, it is unclear how it is possible for the first face of the second layer to be in a "confronting relationship" with the second face of the first layer as recited in claim 1.

Regarding claim 10, the use of the pronoun "its" renders the claim indefinite. One cannot be certain what "it" is intended to refer to.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 2 and 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kelly, Jr. et al. ('783). Kelly, Jr. teaches a monitoring device including a skin patch. The skin patch includes a first layer of material 56, a second layer of material 60, and a telesensor 52,64 for emitting a signal that represents a physiological parameter sensed by a portion of the telesensor

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98, where the telesensor being sandwiched between the first and second layers. The first layer has first and second opposite main faces and the first main face includes a coating of skin-compatible adhesive material. The second layer has first and second opposite main faces and the first main face of the second layer is in confronting relationship with the second main face of the first layer. The first layer includes a flexible circuit substrate 50 of electrically insulating material and the telesensor is attached to the flexible circuit substrate. The flexible circuit substrate has first and second opposite main faces. The first main face of the flexible circuit substrate is in confronting relationship with the second main face of the first layer and the second main face of the flexible circuit substrate is in confronting relationship with the first main face of the second layer. The telesensor is attached to the flexible circuit substrate at the second main face thereof. The second layer is a conformal coating over the telesensor that is resistant to moisture. A conformal coating 54 of electrically and thermally insulating and water impermeable material is disposed over the telesensor. The telesensor 98 can be a temperature sensor (col. 15, lines 27-30). The first layer may be permeable to water vapor present at its first face and the second layer is made of a material that is permeable to water vapor at its first face and is impermeable to liquid water at its second face. The telesensor includes means for encoding the carrier signal with identifying information.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly, Jr. et al. ('783) in view of Bell et al. ('776). Kelly, Jr., as discussed hereinabove, teaches all of the limitations of the claims except that the telesensor is a temperature sensor that includes an astable multivibrator incorporating a thermistor. Bell et al. teach a digital sensor for a miniature medical thermometer. The sensor is a temperature sensor that includes an astable multivibrator 2 incorporating a thermistor 1. The astable multivibrator generates a square wave output signal having a duty cycle that depends on the temperature of the thermistor. A microcontroller 3 that receives the output signal of the multivibrator and generates said temperature signal. The temperature sensor further includes a radio transmitter connected to the microcontroller for receiving the temperature signal and encoding a carrier signal with the temperature signal, and an antenna 6 for radiating the encoded carrier signal. The temperature sensor includes a means for encoding the carrier signal with identifying information. It would have been an obvious design choice to one having ordinary skill in the art at the time Applicant's invention was made to use a temperature sensor including an astable multivibrator similar to that of Bell et al. as the temperature sensor in a skin patch similar to that of Kelly, Jr. in order measure body temperature with using a telemetry system of miniature size.

Allowable Subject Matter

13. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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14. The following is a statement of reasons for the indication of allowable subject matter:

No prior art of record teach or fairly suggest a skin patch including a telesensor, as claimed by Applicant, where a flexible circuit substrate of the patch is formed with through holes spaced from the telesensor for allowing moisture to pass through the substrate.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ferrari ('979) teaches a medical temperature probe cover. Haines et al. ('473) teach a physiological sensor patch. Ridenour ('539) teaches a physical monitoring system for feedlot animals. Smith et al. ('163) teach a wireless spread-spectrum telesensor chip. Rode et al. ('719) teach a system for long-term remote medical monitoring. Hagen et al. ('636) teach a pulse sensing patch. Mok et al. ('541) teaches a wireless electromyography sensor and system.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Beth Jones can be reached on (703) 308-3400. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles A. Marmor, II
Primary Examiner
Art Unit 3736

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March 18, 2004